

# Preserving Yesterday's View of Tomorrow

## The Chicago World's Fair Houses

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**F**or almost 70 years, wind, sand, and surf have battered five houses transplanted along the Lake Michigan shoreline of Northwest Indiana.

The houses were built for the 1933 Chicago World's Fair to celebrate a "Century of Progress" and demonstrate modern architectural design, experimental materials, and new technologies such as central air conditioning and dishwashers. Organized around the "theme of science and its role in industrial development,"<sup>1</sup> this World's Fair was planned in times of prosperity but opened in the midst of the Great Depression.

The exhibit homes within the Home and Industrial Arts Group "utilized new techniques of design, construction and prefabrication in an attempt to bring the out-of-date housing industry into line with more efficient manufacturing practices such as those used by the auto industry."<sup>2</sup> A period publication explained that:

Although all the houses are moderne in architecture and have for their interior motif the practical demonstration of the latest trends in home furnishing and decoration, lighting, labor saving devices, and combination heating and air-cooling plants, each is as different from its neighbor as the material used in constructing its outside walls."<sup>3</sup>

In fact, they were much more than model houses. They were visions of what some designers and builders hoped Americans would call home in the years to come – visions of a future that has yet to come.

### *The Move to Beverly Shores*

After the close of the Fair in the fall of 1934, five of the houses were sold to Chicago real estate developer Robert Bartlett. He brought them by barge and truck to the Indiana dunes, hoping that these and 10 other structures relocated from the World's Fair would entice buyers to his resort community of Beverly Shores, IN.<sup>4</sup>

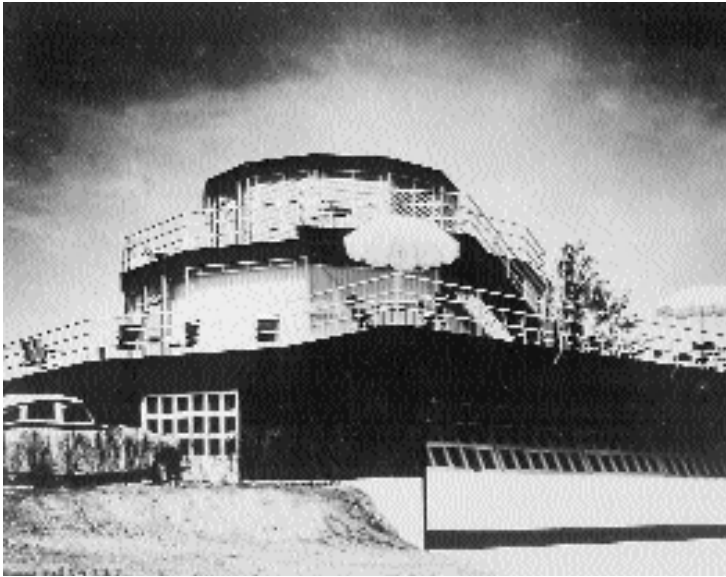
Bartlett had taken over the development of the community from his brother the previous year and began aggressively marketing Beverly Shores real estate in the Depression-battered market.<sup>5</sup> In the ethnic neighborhoods of Chicago, he promoted the resort with its theatre, restaurant, and golf course as part of the American dream. Chauffeur-driven Packards picked up dream-seekers at the Beverly Shores railroad station.

Bartlett intended to furnish the five World's Fair houses, open them to the public, and sell them starting in October 1935. However, his dreams were never fulfilled. By 1938, only one house — the House of Tomorrow — had been sold. Seasonal renters occupied two houses, and two were vacant. Prospects for the houses and for the development became even bleaker with the approach and outbreak of World War II. By 1946, Bartlett had sold off his interests in the resort; and in 1947 the community incorporated as a municipality.

### *Park + Partners = Preservation*

In 1966, Congress created the Indiana Dunes National Lakeshore. The most heavily developed section of Beverly Shores was excluded





*The House of Tomorrow at the 1933 Chicago World's Fair. Entrance to the airplane hangar is at the bottom right.*

from its boundaries. However, all 5 miles of lake-front property came into the park, including the World's Fair houses. Under the Reservation of Use and Occupancy program at Indiana Dunes National Lakeshore, an owner who sells a property to the park can continue to live in the house for a fixed term or life estate. Acquisition of the World's Fair houses began in the 1970s; the owners of each of the houses reserved occupancy for up to 25 years.

"These unique homes were never designed to exist after the World's Fair closed," noted park Superintendent Dale Engquist. "Acquiring them after decades of residential use presented us with an expensive maintenance challenge right from the onset."

The homes were listed on the National Register of Historic Places in 1986. In 1993, the

Historic Landmarks Foundation of Indiana, a statewide nonprofit preservation organization, included the Century of Progress houses on their "Ten Most Endangered Sites in Indiana" list.

The national lakeshore and the Historic Landmarks Foundation entered into a formal agreement in 1996 to protect and maintain the houses through a long-term residential leasing program. Under the agreement, the Historic Landmarks Foundation agreed to recruit sublessees to rehabilitate the houses following "The Secretary of the Interior's Standards for the Treatment of Historic Properties" and the guidelines for rehabilitation.

The leasing program has been very successful in bringing attention to the condition of the buildings. Hundreds of people have contacted the Historic Landmarks Foundation about preserving the houses. Multiple stumbling blocks—including the high cost of the restoration projects, the lack of financial incentives, and the fact that ownership of the property remains with the National Park Service—have made attracting sublessees a lengthy process. "The biggest challenge, and the most important piece," according to Todd Zeiger, the Historic Landmark Foundation's northern regional director and Century of Progress program manager, "is matching the personality of the house with the personality and ability of the interested individuals."

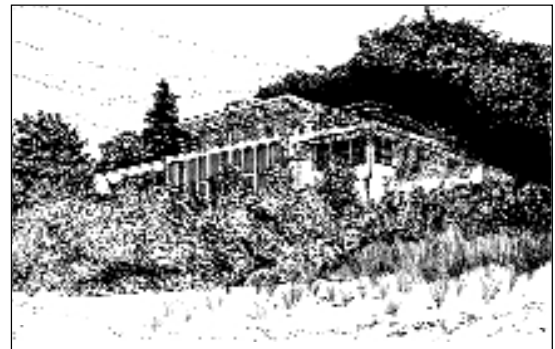
#### ***House of Tomorrow***

The World's Fair house with the most distinct personality is the House of Tomorrow. Bartlett paid only \$2,500 for the 12-sided, 3-story structure. Perched atop a dune ridge, it provides breathtaking views of Lake Michigan.



#### **Wieboldt-Rostone House**

Architect: *Walter Scholer – Lafayette, IN*  
Design Goals: *Structural steel frame covered by panels made from experimental material*  
Status: *Rehabilitation begun 2002*



#### **Florida Tropical House**

Architect: *Robert Law Weed – Miami, FL*  
Design Goals: *Blend indoor and outdoor living and entertaining environments*  
Status: *Rehabilitation begun 1997*



*House of Tomorrow kitchen, 1994. Jack E. Boucher, NPS photographer.*

The steel and concrete structural system of the house was originally assembled at the Fair site in only 48 hours. Its most prominent feature is the floor to ceiling “curtain wall” of glass used to enclose the second and third floors. Chicago architect George Fred Keck defied mechanical engineers who said that due to the expansive use of glass the house couldn’t be heated.<sup>6</sup> Just the opposite occurred. The predicted amount of winter heat loss was far surpassed by the actual solar heat gain, resulting in the failure of the home’s revolutionary air-conditioning system in the summer.<sup>7</sup> When Bartlett moved the house to Beverly Shores, he replaced the glass walls with operable windows to allow for proper air circulation. Keck later became a leader in developing passive solar heating through research and residential design.

Keck’s intent for the House of Tomorrow “. . . was not to give a specific form to his build-

ing, but rather to find a solution to the many and varied new requirements of a residence in a simple and direct manner.”<sup>8</sup> He based the design on the prefabricated structural components and air-conditioning systems that were available at the time. The house offered a kitchen with state-of-the-art gas appliances “calculated to bring joy and satisfaction to the housewife” and copper-clad exterior walls surrounding the first floor service area. In addition to a garage, it boasted an airplane hanger since futurists in 1933 assumed that every family would have both an automobile and an airplane.

“My desire is to restore the house to the 1933 look of the Fair, when it was much more modern,” said Susan Schanlaber, the new lessee and self-styled caretaker of Keck’s greatest creation.<sup>9</sup>

Schanlaber is well suited to the task. She grew up in, and was inspired by, a Keck-designed



#### **Armco-Ferro-Mayflower House**

Architect: Robert Smith, Jr. – Cleveland, OH

Design Goals: Use of porcelain enameled steel panels to mass produce affordable housing

Status: Under Reservation of Occupancy and Use until 2005



#### **House of Tomorrow**

Architect: George Fred Keck – Chicago, IL

Design Goals: Innovative structural system, glass walls, showcase for use of modern materials

Status: Rehabilitation begun 2001



#### **Cypress Log Cabin**

Architect: Murray D. Heatherington – Chicago, IL

Design Goals: Display unique qualities and many uses of cypress as a building material.

Status: Available for lease and rehabilitation

*Wieboldt-Rostone House from the dining room looking through the wall at the kitchen on the right and service hall on the left, 2002. Photo by Ross Gambril.*



home in Aurora, IL. The founder, president, and chief operating officer of the Chicago based Landmark Group of Companies, Schanlaber has extensive experience in acquiring, renovating, and managing historic properties. This past summer, President George W. Bush appointed her to the Advisory Council on Historic Preservation.

The House of Tomorrow was vacated in 1998. Schanlaber began rehabilitation work 3 years later. Carpeting, wall coverings, and other nonhistoric and very deteriorated finish materials have been removed from the interior. Preparations for exterior repairs began by removing two nonhistoric additions—a carport and a second floor screened enclosure.

“It’s a seminal piece of architecture, and it’s important to our history and architectural development,” noted Schanlaber. “On a broad scale, the house needs to be preserved and perpetuated for future generations to see . . . Of course, a side benefit is that my family will enjoy it.”<sup>10</sup>

#### ***An Ironworker’s Dream***

The most visible rehabilitation effort is also the most recent to get underway. The gregarious Ross Gambril has thrown himself into work on a project he freely admits has become “an obsession.”

Gambril’s father toured the housing exhibit at the World’s Fair, and years later drove his son past the distinctive homes that had been moved to Beverly Shores. A magazine article prompted the son to call the Historic Landmarks Foundation and to obtain a tour of the Wieboldt-Rostone House. “Until I walked through, I had no clue it was structural steel and pre-cast slabs,” the experienced ironworker said. “Fifteen minutes

into the house, I said ‘I’ll take it!’ It was perfect. I knew what to do.”

The building, designed by architect Walter Scholer of Lafayette, IN, was originally clad in an experimental material called Rostone. Its creators boasted that the shale, limestone, and alkali slabs could be produced in a variety of colors and forms to exact dimensions.<sup>11</sup> Rostone did not prove to be durable, and in 1950 it was covered by another synthetic finish—concrete stucco called Permastone.

Gambril is considering pulverizing some of the remaining deteriorated Rostone panels and mixing them with an elasticized binder to produce longer lasting panels. His exhaustive research on the structure has turned up the original formula for Rostone as well as the source of the shale and limestone used to make the original panels. With that information new panels could be manufactured to match the originals.

The deteriorated interior finish materials are being removed so Gambril can inspect the structural steel system and the wood framed walls to determine the scope of work needed to return the home to its 1930s splendor. When prompted for a forecast completion date, Gambril boasted, “The first party is scheduled for Memorial Day Weekend 2005.”

The three other Century of Progress homes still exist; all five are arranged in the same relationship to Lake Michigan as they had been placed at the Fair. The Bill Beatty family of Munster, IN, has been diligently bringing life back to the bright pink Florida Tropical House. Lessees are still being sought for the Cypress Log Cabin, while the enameled steel Armco-Ferro-

*The Great Hall of the Cypress Log Cabin, 1994. Jack E. Boucher, NPS photographer.*



Mayflower House is occupied under a Reservation of Use and Occupancy that expires in 2005.

The national lakeshore and the Historic Landmarks Foundation are committed to the long-term preservation of the Century of Progress homes. The partners believe the rehabilitation of the homes through the leasing program is the only feasible way of providing for long-term protection. "This is an excellent way to save properties the National Park Service owns," said Zeiger.

### Notes

- <sup>1</sup> Maria Ali, *The Century of Progress Documentation Project* (Washington, DC: Historic American Buildings Survey, National Park Service, Department of the Interior, 1994).
- <sup>2</sup> Ibid.
- <sup>3</sup> *Chicago and the World's Fair 1933* (Chicago, IL: F. Hulan Publishing Company, Inc., 1933).
- <sup>4</sup> Janice Slupski, *17 West Service Avenue: An Illustration of Dunes Area Recreational Development* (Porter, IN: Indiana Dunes National Lakeshore, National Park Service, Department of the Interior, 1997).
- <sup>5</sup> Ibid.
- <sup>6</sup> Charles Storch, "2 brothers here designing solar buildings 40 years," *Chicago Tribune* (November 4, 1977).
- <sup>7</sup> Ali, op. cit.
- <sup>8</sup> B.R. Graham, *House of Tomorrow, America's First Glass House* (1933).

- <sup>9</sup> Alicia Zartman, "House of Tomorrow Looks to Future," *Indiana Preservationist* #5 (September/October 2002): 4-5

<sup>10</sup> Ibid.

<sup>11</sup> Ali, op. cit.

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- Glass As An Architectural Medium in 9 Small Modern Houses At A Century of Progress 1933-1934, n.d. Boyce, Robert. *Keck & Keck*. Princeton, NJ: Architectural Press, n.d.
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- Jandl, H. Ward, Burns, John A., and Auer, Michael J. *Yesterday's Houses of Tomorrow, Innovative American Homes 1850 to 1950*. Washington, DC: Preservation Press, 1991.

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Illustration credit: Drawings on pages 28-29 by Miles B. Battle, HABS, NPS, 1994. The HABS documentation (measured drawings, photographs, and written history) of these World's Fair houses can be found on the National Park Service Web site at <[www.cr.nps.gov/habshaer/](http://www.cr.nps.gov/habshaer/)>.

*Beverly Shores Railroad Station, built in the Spanish mission style in 1929 boasts a 25-foot-long neon sign, 1994. Jack E. Boucher, NPS photographer.*

